



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/580,847

03/15/2007

Tomoyuki Suzuka

09812.0086

5987

22852 7590 10/06/2010
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

KRAFT, SHIH-WEI

ART UNIT

PAPER NUMBER

2194

MAIL DATE

DELIVERY MODE

10/06/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,847	Applicant(s) SUZUKA, TOMOYUKI	
	Examiner SHIH-WEI KRAFT	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/26/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 in the substitute/replacement sheets filed on 5/26/2006 of the instant application having Application No. 10/580,847 is presented for examination by the examiner.

Examiner Notes

2. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Oath/Declaration

3. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

Priority

4. As required by M.P.E.P. 201.14(c), acknowledgement is made of applicant's claim for priority based on applications filed on September 29, 2004 (Japan 2004-283531) and May 25, 2005 (Japan 2005-152788).

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

However, to overcome a prior art rejection, applicant(s) must submit a translation of the foreign priority papers in order to perfect the claimed foreign priority because said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Drawings

5. The applicant's drawings submitted are acceptable for examination purposes.

Information Disclosure Statement

6. As required by M.P.E.P. 609, the applicant's submissions of the Information Disclosure Statement dated 5/26/2006 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending.

Claim Rejections - 35 USC § 112, 2nd

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4, 5, 9, 12, 13, and 17 recite "own OS". It is unclear to the Examiner if "own OS" is referring to "a control OS", "communication executing OS's" or "a plurality of operating systems (OS's)". For purposes of examination, the Examiner interprets "own OS" to refer to "a control OS".

Claims 2, 3 and 6-8 are rejected for being dependents of claim 1.

Claims 10, 11 and 14-15 are rejected for being dependents of claim 9.

Claims 18 and 19 are rejected for being dependents of claim 17.

Claims 17-19 is directed towards “A computer program”. However, the body of the claim recites “a message transfer control step”, “setting a message area”, “releasing the mapping state”, “an executing step”, “generating a virtual file”, “accessing the message area”, “mapping the message area”, and “accessing directly”. Therefore it is not clear what the claimed computer program is comprised of.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 as directed to non-statutory subject matter.

Claims are directed to “An information processing apparatus” which appears to be software per.

Since software is merely a set of instructions capable of being executed by a computer, the software itself is non-statutory matter.

Claims 17-19 are rejected under 35 U.S.C. 101 as directed to non-statutory subject matter. Claims are directed to “A computer program” which appears to be software per. Since software is merely a set of instructions capable of being executed by a computer, the software itself is non-statutory matter.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2194

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-5, 9-13, 6/2/1, 6/3/2/1, 6/4/1, 6/5/1, 7/2/1, 7/3/2/1, 7/4/1, 7/5/1, 8/7/2/1, 8/7/3/2/1, 8/7/4/1, 8/7/5/1, 14/9, 14/10/9, 14/11/10/9, 14/12/9, 14/13/9, 15/9, 15/10/9, 15/11/10/9, 15/12/9, 15/13/9, 16/15/9, 16/15/10/9, 16/15/11/10/9, 16/15/12/9, 16/15/13/9, 17, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baskey et al. (2002/0129274) (hereinafter Baskey) (in IDS submitted 5/26/2006) in view of Kapoor et al. (US 5,682,534) (hereinafter Kapoor).

As per claim 1, Baskey discloses an information processing apparatus comprising a plurality of operating systems (OS's), the plurality of OS's including a control OS controlling communications between the plurality of OS's, (see ¶23, ¶32, ¶60, ¶62-63)

wherein the control OS controls message transfer between logical partitions set up for respective communication executing OS's, by switching a message area in a physical address space from a mapping state to a message area in a logical partition address space in a message transmitting OS to a mapping state to a message area in a logical partition address space in a message receiving OS, and (see ¶31, ¶69-72, ¶82).

wherein at least one of the communication executing OS's in communication operation generates a system control program containing logical partition management information, performs, together with the control OS, system operation control based on the system control program, and (e.g., "I/O adapter" or "special device driver", see ¶21, ¶29, ¶68, ¶76, ¶84-112)

but Baskey fails to disclose expressly generates a socket associated with a file descriptor identified by a file system managed by own OS.

However Kapoor discloses generates a socket associated with a file descriptor identified by a file system managed by own OS (see col. 6, lines 27-33, Kapoor discloses "a unique socket file is used for each association established between a client and server process", and by default, "these socket files are opened in a directory /var/dce/rpc/socket with the file name prefixed by DCE CN").

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory segments as described by Baskey with the socket file as taught by Kapoor because it would provide for the purpose of boosting overall system performance between processes running on the same machine (see Kapoor col. 8, lines 25-31).

As per claim 2, Baskey in view of Kapoor discloses the information processing apparatus according to claim 1, [see rejection to claim 1 above] wherein at least one of the communication executing OS's in communication operation generates a virtual file accessed via the socket, and accesses the message area in the physical address space via the virtual file (see ¶71, Baskey discloses "Segment 610 is used to hold the definition and allocation tables for segments of Memory (609), which are mapped to Memory K1 (606) and Memory K2 (608) allowing cross partition communication".)

As per claim 3, Baskey in view of Kapoor discloses the information processing apparatus according to claim 2, [see rejection to claim 2 above] wherein at least one of the communication

Art Unit: 2194

executing OS's in communication operation using the socket acquires an identifier of the virtual file associated with the socket, (see Baskey ¶¶71-73) and performs one of a message write operation and a message read operation using the virtual file identified by the acquired virtual file identifier (e.g., "memory to memory move", "memory fetch", and "memory store", see Baskey ¶¶76, ¶82).

As per claim 4, Baskey in view of Kapoor discloses the information processing apparatus according to claim 1, [see rejection to claim 1 above] wherein at least one of the communication executing OS's in communication operation maps the message area in the physical address space to an address space of a process via the socket so that the process directly accesses the message area (see Baskey ¶¶76, ¶82) but Baskey fails to disclose expressly generates a socket associated with a file descriptor identified by a file system managed by own OS.

However Kapoor discloses generates a socket associated with a file descriptor identified by a file system managed by own OS (see col. 6, lines 27-33, Kapoor discloses "a unique socket file is used for each association established between a client and server process", and by default, "these socket files are opened in a directory /var/dce/rpc/socket with the file name prefixed by DCE CN").

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory segments as described by Baskey with the socket file as taught by Kapoor because it would provide for the purpose of boosting overall system performance between processes running on the same machine (see Kapoor col. 8, lines 25-31).

As per claim 5, Baskey in view of Kapoor discloses the information processing apparatus according to claim 1, [see rejection to claim 1 above] wherein at least one of the communication executing OS's in communication operation maps the message area in the physical address space to an address space of a logical partition corresponding to the communication executing OS via the socket in order to access the message area (see Baskey ¶76, ¶82) but Baskey fails to disclose expressly generates a socket associated with a file descriptor identified by a file system managed by own OS.

However Kapoor discloses generates a socket associated with a file descriptor identified by a file system managed by own OS (see col. 6, lines 27-33, Kapoor discloses "a unique socket file is used for each association established between a client and server process", and by default, "these socket files are opened in a directory /var/dce/rpc/socket with the file name prefixed by DCE CN").

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory segments as described by Baskey with the socket file as taught by Kapoor because it would provide for the purpose of boosting overall system performance between processes running on the same machine (see Kapoor col. 8, lines 25-31).

As per claim 6/2/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 2 above] wherein the communication executing OS in communication operation using the socket sets an identifier of service corresponding to the socket, (see Baskey ¶76, ¶82) and sets communication permission corresponding to the service (see Baskey ¶22, ¶69, ¶72, ¶82).

As per claim 6/3/2/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 3 above] wherein the communication executing OS in communication operation using the socket sets an identifier of service corresponding to the socket, (see Baskey ¶76, ¶82) and sets communication permission corresponding to the service (see Baskey ¶22, ¶69, ¶72, ¶82).

As per claim 6/4/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 4 above] wherein the communication executing OS in communication operation using the socket sets an identifier of service corresponding to the socket, (see Baskey ¶76, ¶82) and sets communication permission corresponding to the service (see Baskey ¶22, ¶69, ¶72, ¶82).

As per claim 6/5/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 5 above] wherein the communication executing OS in communication operation using the socket sets an identifier of service corresponding to the socket, (see Baskey ¶76, ¶82) and sets communication permission corresponding to the service (see Baskey ¶22, ¶69, ¶72, ¶82).

As per claim 7/2/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 2 above] wherein the communication executing OS in communication operation using the socket performs a reception monitoring process on a message via the socket (e.g., “A socket interface is a construct that relates a specific port of the TCP/IP stack to a listening user process.”, see Baskey ¶76, ¶82).

As per claim 7/3/2/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 3 above] wherein the communication executing OS in communication operation using the socket performs a reception monitoring process on a message via the socket (e.g., “A socket interface is a construct that relates a specific port of the TCP/IP stack to a listening user process.”, see Baskey ¶76, ¶82).

As per claim 7/4/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 4 above] wherein the communication executing OS in communication operation using the socket performs a reception monitoring process on a message via the socket (e.g., “A socket interface is a construct that relates a specific port of the TCP/IP stack to a listening user process.”, see Baskey ¶76, ¶82).

As per claim 7/5/1, Baskey in view of Kapoor discloses the information processing apparatus according to one of claims 2 through 5, [see rejection to claim 5 above] wherein the communication executing OS in communication operation using the socket performs a reception monitoring process on a message via the socket (e.g., “A socket interface is a construct that relates a specific port of the TCP/IP stack to a listening user process.”, see Baskey ¶76, ¶82).

As per claim 8/7/2/1, Baskey in view of Kapoor discloses the information processing apparatus according to claim 7, [see rejection to claim 7 above] wherein the communication executing OS performs the reception monitoring process on the message via the socket by applying a select system call (e.g., “The device driver then indicates to kernel that the socket has data waiting for it.”, see Baskey ¶72-73, ¶76, ¶82).

As per claim 8/7/3/2/1, Baskey in view of Kapoor discloses the information processing apparatus according to claim 7, [see rejection to claim 7 above] wherein the communication executing OS performs the reception monitoring process on the message via the socket by applying a select system call (e.g., “The device driver then indicates to kernel that the socket has data waiting for it.”, see Baskey ¶72-73, ¶76, ¶82).

As per claim 8/7/4/1, Baskey in view of Kapoor discloses the information processing apparatus according to claim 7, [see rejection to claim 7 above] wherein the communication executing OS performs the reception monitoring process on the message via the socket by applying a select system call (e.g., “The device driver then indicates to kernel that the socket has data waiting for it.”, see Baskey ¶72-73, ¶76, ¶82).

As per claim 8/7/5/1, Baskey in view of Kapoor discloses the information processing apparatus according to claim 7, [see rejection to claim 7 above] wherein the communication executing OS performs the reception monitoring process on the message via the socket by applying a select system call (e.g., “The device driver then indicates to kernel that the socket has data waiting for it.”, see Baskey ¶72-73, ¶76, ¶82).

As per claim 9, Baskey discloses a communication processing method of an information processing apparatus storing a plurality of operating systems (OS's), comprising: (see ¶23, ¶32, ¶60, ¶62-63)

a message transfer control step performed by a control OS between communication executing OS's, the message transfer control step comprising (see ¶21, ¶23, ¶32, ¶60, ¶62-63)

setting a message area in a physical address space to a mapping state to map to a message area in a logical partition address space of a message transmitting OS, and (see ¶31, ¶69-72, ¶82)

releasing the mapping state and setting the message area in the physical address space to a mapping state to map to a message area in a logical partition address space of a message receiving OS, and (e.g., “logical partition assignment of a particular processor or I/O may be dynamically changed”, see ¶69-72, ¶82)

an executing step performed by at least one of the communication executing OS's in communication operation, the executing step comprising generating a system control program containing logical partition management information, performing, together with the control OS, system operation control based on the system control program, (e.g., “I/O adapter” or “special device driver” , see ¶21, ¶29, ¶68, ¶76, ¶84-112)

but Baskey fails to disclose expressly generating a socket associated with a file descriptor identified by a file system managed by own OS.

However Kapoor discloses generates a socket associated with a file descriptor identified by a file system managed by own OS (see col. 6, lines 27-33, Kapoor discloses "a unique socket file is used for each association established between a client and server process", and by default, "these socket files are opened in a directory /var/dce/rpc/socket with the file name prefixed by DCE CN").

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory segments as described by Baskey with the socket file as taught by Kapoor because it would provide for the purpose of boosting overall system performance

Art Unit: 2194

between processes running on the same machine (see Kapoor col. 8, lines 25-31).

Regarding claim 10, it is a method claim having similar limitations as cited in claim 2.

Thus, claim 10 is also rejected under the same rationale as cited in the rejection of rejected claim 2.

Regarding claim 11, it is a method claim having similar limitations as cited in claim 3.

Thus, claim 11 is also rejected under the same rationale as cited in the rejection of rejected claim 3.

Regarding claim 12, it is a method claim having similar limitations as cited in claim 4.

Thus, claim 12 is also rejected under the same rationale as cited in the rejection of rejected claim 4.

Regarding claim 13, it is a method claim having similar limitations as cited in claim 5.

Thus, claim 13 is also rejected under the same rationale as cited in the rejection of rejected claim 5.

As per claim 14/9, Baskey in view of Kapoor discloses the communication processing method according to claim 9, [see rejection to claim 9 above] wherein the communication executing OS in communication operation using the socket sets an identifier of service

Art Unit: 2194

corresponding to the socket, (see Baskey ¶76, ¶82) and sets communication permission corresponding to the service (see Baskey ¶22, ¶69, ¶72, ¶82).

Regarding claim 14/10/9, it is a method claim having similar limitations as cited in claim 6/2/1. Thus, claim 14/10/9 is also rejected under the same rationale as cited in the rejection of rejected claim 6/2/1.

Regarding claim 14/11/10/9, it is a method claim having similar limitations as cited in claim 6/3/2/1. Thus, claim 14/11/10/9 is also rejected under the same rationale as cited in the rejection of rejected claim 6/3/2/1.

Regarding claim 14/12/9, it is a method claim having similar limitations as cited in claim 6/4/1. Thus, claim 14/12/9 is also rejected under the same rationale as cited in the rejection of rejected claim 6/4/1.

Regarding claim 14/13/9, it is a method claim having similar limitations as cited in claim 6/5/1. Thus, claim 14/13/9 is also rejected under the same rationale as cited in the rejection of rejected claim 6/5/1.

As per claim 15/9, Baskey in view of Kapoor discloses the information processing apparatus according to claim 9, [see rejection to claim 9 above] wherein the communication executing OS in communication operation using the socket performs a reception monitoring process on a message via the socket (e.g., “A socket interface is a construct that relates a specific port of the TCP/IP stack to a listening user process.”, see Baskey ¶76, ¶82).

Regarding claim 15/10/9, it is a method claim having similar limitations as cited in claim 7/2/1. Thus, claim 15/10/9 is also rejected under the same rationale as cited in the rejection of rejected claim 7/2/1.

Regarding claim 15/11/10/9, it is a method claim having similar limitations as cited in claim 7/3/2/1. Thus, claim 15/11/10/9 is also rejected under the same rationale as cited in the rejection of rejected claim 7/3/2/1.

Regarding claim 15/12/9, it is a method claim having similar limitations as cited in claim 7/4/1. Thus, claim 15/12/9 is also rejected under the same rationale as cited in the rejection of rejected claim 7/4/1.

Regarding claim 15/13/9, it is a method claim having similar limitations as cited in claim 7/5/1. Thus, claim 15/13/9 is also rejected under the same rationale as cited in the rejection of rejected claim 7/5/1.

As per claim 16/15/9, Baskey in view of Kapoor discloses the information processing apparatus according to claim 15, [see rejection to claim 15 above] wherein the communication executing OS performs the reception monitoring process on the message via the socket by applying a select system call (e.g., “The device driver then indicates to kernel that the socket has data waiting for it.”, see Baskey ¶72-73, ¶76, ¶82).

Regarding claim 16/15/10/9, it is a method claim having similar limitations as cited in claim 8/7/2/1. Thus, claim 16/15/10/9 is also rejected under the same rationale as cited in the rejection of rejected claim 8/7/2/1.

Regarding claim 16/15/11/10/9, it is a method claim having similar limitations as cited in claim 8/7/3/2/1. Thus, claim 16/15/11/10/9 is also rejected under the same rationale as cited in the rejection of rejected claim 8/7/3/2/1.

Regarding claim 16/15/12/9, it is a method claim having similar limitations as cited in claim 8/7/4/1. Thus, claim 16/15/12/9 is also rejected under the same rationale as cited in the rejection of rejected claim 8/7/4/1.

Regarding claim 16/15/13/9, it is a method claim having similar limitations as cited in claim 8/7/5/1. Thus, claim 16/15/13/9 is also rejected under the same rationale as cited in the rejection of rejected claim 8/7/5/1.

As per claim 17, Baskey discloses a computer program for controlling communications in an information processing apparatus storing a plurality of operating systems (OS's), comprising: (see ¶23, ¶32, ¶60, ¶62-63)

a message transfer control step performed by a control OS between communication executing OS, the message transfer control step comprising (see ¶21, ¶23, ¶32, ¶60, ¶62-63)

setting a message area in a physical address space to a mapping state to map to a message area in a logical partition address space of a message transmitting OS, and (see ¶31, ¶69-72, ¶82)

releasing the mapping state and setting the message area in the physical address space to map to a message area in a logical partition address space of a message receiving OS, and (e.g., “logical partition assignment of a particular processor or I/O may be dynamically changed”, see ¶69-72, ¶82)

Art Unit: 2194

an executing step performed by at least one of the communication executing OS's in communication operation, the executing step comprising generating a system control program containing logical partition management information, performing, together with the control OS, system operation control based on the system control program, (e.g., "I/O adapter" or "special device driver", see ¶21, ¶29, ¶68, ¶76, ¶84-112)

but Baskey fails to disclose expressly generating a socket associated with a file descriptor identified by a file system managed by own OS.

However Kapoor discloses generates a socket associated with a file descriptor identified by a file system managed by own OS (see col. 6, lines 27-33, Kapoor discloses "a unique socket file is used for each association established between a client and server process", and by default, "these socket files are opened in a directory /var/dce/rpc/socket with the file name prefixed by DCE CN").

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the memory segments as described by Baskey with the socket file as taught by Kapoor because it would provide for the purpose of boosting overall system performance between processes running on the same machine (see Kapoor col. 8, lines 25-31).

As per claim 18, Baskey in view of Kapoor discloses the computer program according to claim 17 [see rejection to claim 17 above] wherein the executing step performed by at least one of the communication executing OS's in communication operation comprises

generating a virtual file accessed via the socket, and (e.g., “Segment 610 is used to hold the definition and allocation tables for segments of Memory (609), which are mapped to Memory K1 (606) and Memory K2 (608) allowing cross partition communication”, see ¶71)

accessing the message area in the physical address space via the virtual file in order to perform message transfer (e.g., “memory to memory move”, “memory fetch”, and “memory store”, see ¶69-72, ¶76, ¶82).

As per claim 19, Baskey in view of Kapoor discloses the computer program according to claim 17, [see rejection to claim 17 above] wherein the executing step performed by at least one of the communication executing OS's in communication operation comprises

mapping the message area in the physical address space to an address space of a process via the socket, and (see ¶69-72, ¶76, ¶82)

accessing directly the message area (e.g., “memory to memory move”, “memory fetch”, and “memory store”, see ¶69-72, ¶76, ¶82).

Conclusion

12. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

13. The following reference teaches execution of trial data.

US 2003/0065833 titled "Initiative Passing in an I/O Operation Without the Overhead of an Interrupt" by Brice, JR. et al. (hereinafter Brice). Brice discloses vertical scaling (all devices are managed by a single operating system (OS) image), and horizontal scaling (a single host provides separate virtual environments, with each having their own OS image) where device drivers drive data exchanges between LPARs through send queues and receive or target queues.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Wei Kraft whose telephone number is (571) 270-3388. The examiner can normally be reached on Monday to Friday 6:30 AM to 3:30 PM.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Hyung Sough, can be reached at the following telephone number: (571) 272-6799.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/580,847
Art Unit: 2194

Page 20

/Hyung S. SOUGH/
Supervisory Patent Examiner, Art Unit 2194
09/30/10

/S. K./
Examiner, Art Unit 2194